CASE REPORT: ANTICOAGULANT RODENTICIDE POISONING IN A YOUNG DOG.

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INTRODUCTION: Anticoagulant rodenticide poisoning is a common clinical emergency in small animal veterinary medicine, especially in puppies, due to their natural curiosity and easy access to these compounds. These agents interfere with the recycling of vitamin K, which is essential for blood coagulation, leading to potentially fatal hemorrhages. Early diagnosis and immediate initiation of appropriate therapy are critical for the patient's prognosis.

CASE REPORT:

A five-month-old, 8 kg, mixed-breed female dog was presented to the Veterinary Hospital of the University of Passo Fundo (HV-UPF) with suspected accidental ingestion of a coumarin-based rodenticide (Bromadiolone) approximately four days earlier. The owner reported prior treatment with vitamin K and diminazene diaceturate. On clinical examination, the patient showed apathy, dehydration, pale mucous membranes, weak pulse, and active bleeding at the site of prior medication application. Laboratory tests revealed normocytic normochromic anemia (hematocrit 22%, hemoglobin 7.4 g/dL), neutrophilia, lymphopenia, hypoproteinemia, hypoalbuminemia, elevated urea, and prolonged coagulation times (PT: >120s, aPTT: 41.6s). Based on these findings, treatment was initiated with intensive fluid therapy, whole fresh blood transfusion (20 mL/kg), and subcutaneous vitamin K (1 mg/kg, SID). During transfusion, the patient experienced a hypersensitivity reaction, which was managed with antihistamines. After two days of hospitalization and clinical improvement, the patient was discharged with a prescription for vitamin K for na additional 10 days.

DISCUSSION:

The clinical presentation was consistent with coumarin rodenticide poisoning, characterized by anemia due to acute hemorrhage caused by a coagulation disorder. Vitamin K inhibition compromises the activation of vitamin K-dependent clotting factors, as evidenced by prolonged PT and aPTT. The therapeutic approach using vitamin K supplementation and transfusional support proved effective, leading to clinical stabilization. This case emphasizes the importance of rapid and assertive management in rodenticide intoxication, with continuous clinical and laboratory monitoring being essential to ensure full recovery.

Keywords: Dogs; Coumarins; Vitamin K antagonists; Acute hemorrhage